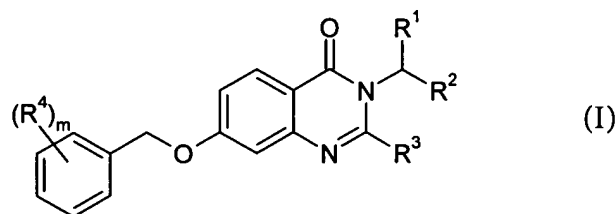


Claims

1. A compound of formula I



wherein

R^1 is $-(CH_2)_n-CO-NR^5R^6$; $-(CH_2)_n-COOR^7$; $-(CH_2)_n-NR^5R^6$; $-(CH_2)_n-CN$; $-(CH_2)_n-OR^8$; or phenyl, which is unsubstituted or substituted by one to three substituents selected from halogen and fluoro(C_1 - C_6)-alkyl;

R^2 is hydrogen, halogen or C_1 - C_6 -alkyl;

R^3 is hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -cycloalkyl or benzyl;

R^4 is halogen, fluoro(C_1 - C_6)-alkyl, cyano, C_1 - C_6 -alkoxy or fluoro(C_1 - C_6)-alkoxy;

R^5 and R^6 are independently from each other hydrogen or C_1 - C_6 -alkyl;

R^7 is hydrogen or C_1 - C_6 -alkyl;

R^8 is hydrogen or C_1 - C_6 -alkyl;

m is 1, 2 or 3; and

n is 0, 1 or 2;

or a pharmaceutically acceptable salt thereof.

2. The compound of formula I according to claim 1 wherein

R^1 is $-(CH_2)_n-CO-NR^5R^6$; $-(CH_2)_n-COOR^7$; $-(CH_2)_n-NR^5R^6$; $-(CH_2)_n-CN$; $-(CH_2)_n-OR^8$; or phenyl, which is unsubstituted or substituted by one to three substituents selected from halogen and fluoro(C_1 - C_6)-alkyl;

R^2 is hydrogen or C_1 - C_6 -alkyl;

R^3 is hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -cycloalkyl or benzyl;

R^4 is halogen, fluoro(C_1 - C_6)-alkyl, cyano, C_1 - C_6 -alkoxy or fluoro(C_1 - C_6)-alkoxy;

R^5 and R^6 are independently from each other hydrogen or C_1 - C_6 -alkyl;

R^7 is hydrogen or C_1 - C_6 -alkyl;

R⁸ is hydrogen or C₁-C₆-alkyl;
m is 1, 2 or 3; and
n is 0, 1 or 2;
or a pharmaceutically acceptable salt.

3. The compound of formula I according to claim 1 wherein R¹ is -(CH₂)_n-CO-NR⁵R⁶; -(CH₂)_n-COOR⁷; -(CH₂)_n-NR⁵R⁶; -(CH₂)_n-CN; -(CH₂)_n-OR⁸; or phenyl, which is unsubstituted or substituted by one to three substituents selected from halogen and fluoro(C₁-C₆)-alkyl;

R² is halogen or C₁-C₆-alkyl;
R³ is hydrogen, C₁-C₆-alkyl, C₃-C₆-cycloalkyl or benzyl;
R⁴ is halogen, fluoro(C₁-C₆)-alkyl, cyano, C₁-C₆-alkoxy or fluoro(C₁-C₆)-alkoxy;
R⁵ and R⁶ are independently from each other hydrogen or C₁-C₆-alkyl;
R⁷ is hydrogen or C₁-C₆-alkyl;
R⁸ is hydrogen or C₁-C₆-alkyl;
m is 1, 2 or 3; and
n is 0, 1 or 2;
or a pharmaceutically acceptable salt thereof.

4. The compound of formula I according to claim 1 wherein
R¹ is -(CH₂)_n-CO-NR⁵R⁶; -(CH₂)_n-COOR⁷; -(CH₂)_n-NR⁵R⁶; -(CH₂)_n-CN; -(CH₂)_n-OR⁸; or phenyl, which is unsubstituted or substituted by one to three substituents selected from halogen and fluoro(C₁-C₆)-alkyl;
R² is hydrogen, halogen or C₁-C₆-alkyl;
R³ is hydrogen or C₁-C₆-alkyl,
R⁴ is halogen, fluoro(C₁-C₆)-alkyl, cyano, C₁-C₆-alkoxy or fluoro(C₁-C₆)-alkoxy;
R⁵ and R⁶ are independently from each other hydrogen or C₁-C₆-alkyl;
R⁷ is hydrogen or C₁-C₆-alkyl;
R⁸ is hydrogen or C₁-C₆-alkyl;
m is 1, 2 or 3; and
n is 0, 1 or 2;
or a pharmaceutically acceptable salt thereof.

5. The compound of formula I according to claim 1 wherein
 R^1 is $-(CH_2)_n-CO-NR^5R^6$; $-(CH_2)_n-COOR^7$; $-(CH_2)_n-NR^5R^6$; $-(CH_2)_n-CN$; $-(CH_2)_n-OR^8$; or phenyl, which is unsubstituted or substituted by one to three substituents selected from halogen and fluoro(C_1-C_6)-alkyl;
 R^2 is hydrogen, halogen or C_1-C_6 -alkyl;
 R^3 is C_3-C_6 -cycloalkyl or benzyl;
 R^4 is halogen, fluoro(C_1-C_6)-alkyl, cyano, C_1-C_6 -alkoxy or fluoro(C_1-C_6)-alkoxy;
 R^5 and R^6 are independently from each other hydrogen or C_1-C_6 -alkyl;
 R^7 is hydrogen or C_1-C_6 -alkyl;
 R^8 is hydrogen or C_1-C_6 -alkyl;
 m is 1, 2 or 3; and
 n is 0, 1 or 2;
or a pharmaceutically acceptable salt thereof.

6. The compound of formula I according to claim 1 wherein
 R^1 is $-(CH_2)_n-CO-NH_2$; $-(CH_2)_n-COOR^7$; $-(CH_2)_n-NH_2$; $-(CH_2)_n-CN$; $-(CH_2)_n-OR^8$; or phenyl, which is unsubstituted or substituted by one to three substituents selected from halogen and fluoro(C_1-C_6)-alkyl;
 R^2 is hydrogen, halogen or C_1-C_6 -alkyl;
 R^3 is hydrogen, C_1-C_6 -alkyl, C_3-C_6 -cycloalkyl or benzyl;
 R^4 is halogen, fluoro(C_1-C_6)-alkyl, cyano, C_1-C_6 -alkoxy or fluoro(C_1-C_6)-alkoxy;
 R^5 and R^6 are independently from each other hydrogen or C_1-C_6 -alkyl;
 R^7 is hydrogen or C_1-C_6 -alkyl;
 R^8 is hydrogen or C_1-C_6 -alkyl;
 m is 1, 2 or 3; and
 n is 0, 1 or 2;
or a pharmaceutically acceptable salt thereof.

7. The compound of formula I according to claim 1 wherein
 R^1 is $-(CH_2)_n-CO-NR^5R^6$; $-(CH_2)_n-COOR^7$; $-(CH_2)_n-NR^5R^6$; $-(CH_2)_n-CN$; $-(CH_2)_n-OR^8$; or phenyl, which is unsubstituted or substituted by one to three substituents selected from halogen and fluoro(C_1-C_6)-alkyl;
 R^2 is hydrogen, halogen or C_1-C_6 -alkyl;

R^3 is hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -cycloalkyl or benzyl;
 R^4 is halogen, fluoro(C_1 - C_6)-alkyl;
 R^5 and R^6 are independently from each other hydrogen or C_1 - C_6 -alkyl;
 R^7 is hydrogen or C_1 - C_6 -alkyl;
 R^8 is hydrogen or C_1 - C_6 -alkyl;
 m is 1, 2 or 3; and
 n is 0, 1 or 2;
 or a pharmaceutically acceptable salt thereof.

8. The compound of formula I according to claim 1 wherein
 R^1 is $-(CH_2)_n-CO-NR^5R^6$; $-(CH_2)_n-COOR^7$; $-(CH_2)_n-NR^5R^6$; $-(CH_2)_n-CN$; $-(CH_2)_n-OR^8$; or phenyl, which is unsubstituted or substituted by one to three substituents selected from halogen and fluoro(C_1 - C_6)-alkyl;
 R^2 is hydrogen, halogen or C_1 - C_6 -alkyl;
 R^3 is hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -cycloalkyl or benzyl;
 R^4 is C_1 - C_6 -alkoxy or fluoro(C_1 - C_6)-alkoxy;
 R^5 and R^6 are independently from each other hydrogen or C_1 - C_6 -alkyl;
 R^7 is hydrogen or C_1 - C_6 -alkyl;
 R^8 is hydrogen or C_1 - C_6 -alkyl;
 m is 1, 2 or 3; and
 n is 0, 1 or 2;
 or a pharmaceutically acceptable salt thereof.

9. The compound of formula I according to claim 1 wherein R^1 is $-(CH_2)_n-CO-NR^5R^6$.

10. The compound of formula I according to claim 1 wherein R^1 is $-(CH_2)_n-COOR^7$.

11. The compound of formula I according to claim 1 wherein R^1 is $-(CH_2)_n-NR^5R^6$.

12. The compound of formula I according to claim 1 wherein R^1 is $-(CH_2)_n-CN$.

13. The compound of formula I according to claim 1 wherein R^1 is $-(CH_2)_n-$ OR⁸.
14. The compound of formula I according to claim 1 wherein R^1 is phenyl, which is unsubstituted or substituted by one to three substituents selected from halogen and fluoro(C_1 - C_6)-alkyl.
15. The compound of formula I according to claim 14 wherein said phenyl is substituted by halogen.
16. The compound of formula I according to claim 1 wherein R^2 is hydrogen.
17. The compound of formula I according to claim 1 wherein R^2 is halogen.
18. The compound of formula I according to claim 1 wherein R^2 is C_1 - C_6 -alkyl.
19. The compound of formula I according to claim 1 wherein R^3 is hydrogen.
20. The compound of formula I according to claim 1 wherein R^3 is C_1 - C_6 -alkyl.
21. The compound of formula I according to claim 1 wherein R^3 is C_3 - C_6 -cycloalkyl.
22. The compound of formula I according to claim 1 wherein R^3 is benzyl.
23. The compound of formula I according to claim 1 wherein R^3 is hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -cycloalkyl or benzyl.
24. The compound of formula I according to claim 1 wherein R^4 is halogen or fluoro(C_1 - C_6)-alkyl.
25. The compound of formula I according to claim 1 wherein R^4 is cyano.

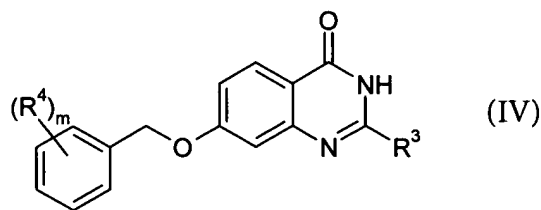
26. The compound of formula I according to claim 1 wherein R⁴ is C₁-C₆-alkoxy or fluoro(C₁-C₆)-alkoxy.
27. The compound of formula I according to claim 1 wherein R⁷ is hydrogen.
28. The compound of formula I according to claim 1 wherein R⁷ is (C₁-C₆)-alkyl.
29. A compound of formula I according to claim 1 selected from
2-[7-(3-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-acetamide,
2-[7-(3-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-propionamide,
2-[7-(4-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-acetamide,
2-[7-(4-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-propionamide,
2-[7-(3-fluoro-benzyloxy)-2-methyl-4-oxo-4H-quinazolin-3-yl]-acetamide, and
2-[2-cyclopropyl-7-(3-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-acetamide.
30. A compound of formula I according to claim 1 selected from
7-(3-fluoro-benzyloxy)-3-(2-methoxy-ethyl)-3H-quinazolin-4-one,
7-(4-fluoro-benzyloxy)-3-(2-methoxy-ethyl)-3H-quinazolin-4-one,
7-(3-fluoro-benzyloxy)-3-(2-methoxy-ethyl)-2-methyl-3H-quinazolin-4-one,
3-(2-amino-ethyl)-7-(3-fluoro-benzyloxy)-3H-quinazolin-4-one 1:2 hydrochloride,
3-(3-amino-propyl)-7-(3-fluoro-benzyloxy)-3H-quinazolin-4-one 1:2 hydrochloride,
3-(2-amino-ethyl)-7-(4-fluoro-benzyloxy)-3H-quinazolin-4-one 1:1 hydrochloride, and
2-[7-(3-fluoro-benzyloxy)-2-methyl-4-oxo-4H-quinazolin-3-yl]-ethyl-ammonium chloride.
31. A compound of formula I according to claim 1 selected from
[7-(3-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-acetic acid ethyl ester;
fluoro-[7-(3-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-acetic acid ethyl ester;
2-[7-(3-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-propionic acid ethyl ester;

[7-(3-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-acetic acid tert-butyl ester;
 2-[7-(3-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-propionic acid tert-butyl ester;
 [7-(4-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-acetic acid ethyl ester; and
 2-[7-(4-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-propionic acid ethyl ester.

32. A compound of formula I according to claim 1 selected from
 3-(3-fluoro-benzyl)-7-(3-fluoro-benzyloxy)-3H-quinazolin-4-one;
 3-[7-(4-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-propionamide;
 2-[7-(3-fluoro-benzyloxy)-2-isopropyl-4-oxo-4H-quinazolin-3-yl]-acetamide;
 [7-(3-fluoro-benzyloxy)-2-isopropyl-4-oxo-4H-quinazolin-3-yl]-acetonitrile;
 2-cyclopropyl-7-(3-fluoro-benzyloxy)-3-(2-methoxy-ethyl)-3H-quinazolin-4-one;
 [2-cyclopropyl-7-(3-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-acetic acid methyl ester; and
 2-[2-benzyl-7-(3-fluoro-benzyloxy)-4-oxo-4H-quinazolin-3-yl]-acetamide.

33. A pharmaceutical composition comprising a compound of formula I according to claim 1 and a pharmaceutically acceptable carrier.

34. A process for the preparation of a compound of formula I according to claim 1 comprising reacting a compound of formula IV



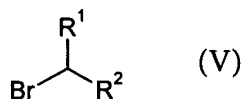
wherein

R³ is hydrogen, C₁-C₆-alkyl, C₃-C₆-cycloalkyl or benzyl;

R⁴ is halogen, fluoro(C₁-C₆)-alkyl, cyano, C₁-C₆-alkoxy or fluoro(C₁-C₆)-alkoxy; and

m is 1, 2 or 3

with a compound of formula V



wherein

R^1 is $-(CH_2)_n-CO-NR^5R^6$; $-(CH_2)_n-COOR^7$; $-(CH_2)_n-NR^5R^6$; $-(CH_2)_n-CN$; $-(CH_2)_n-OR^8$; or phenyl, which is unsubstituted or substituted by one to three substituents selected from halogen and fluoro(C_1-C_6)-alkyl;

R^2 is hydrogen, halogen or C_1-C_6 -alkyl;

R^5 and R^6 are independently from each other hydrogen or C_1-C_6 -alkyl;

R^7 is hydrogen or C_1-C_6 -alkyl;

R^8 is hydrogen or C_1-C_6 -alkyl; and

n is 0, 1 or 2.

35. A method of treating Alzheimer's disease in an individual comprising administering to the individual an effective amount of a compound according to claim 1.

36. A method of treating senile dementia in an individual comprising administering to the individual an effective amount of a compound according to claim 1.

37. A method of treating Parkinson's disease in an individual comprising administering to the individual an effective amount of a compound according to claim 1.